

PATENT

Attorney Docket No.: 44684-0001 US1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

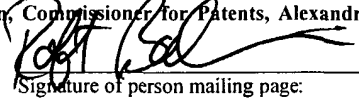
In re:	Patent application of Howard B. Gamper, et al.	:	Group Art Unit: Not Yet Assigned
Serial No.:	Not Yet Assigned	:	Continuation of: 09/874,720 filed June 5, 2001
Filed:	Herewith	:	Prior Examiner: Richard A. Schnizer
For:	BINARY HYBRID MUTATIONAL VECTORS	:	Prior Art Unit 1635

INFORMATION DISCLOSURE STATEMENT

Mail Stop PATENT APPLICATION
Commissioner for Patents
Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. § 1.56 and in accordance with 37 C.F.R. §§1.97-1.98,
submitted herewith is an accompanying substitute Form PTO-1449.

CERTIFICATE OF MAILING UNDER 37 C.F.R. 1.10
EXPRESS MAIL Mailing Label Number: <u>EL 931 088 761 US</u>
Date of Deposit: <u>July 7, 2003</u>
I hereby certify that this correspondence, along with any paper referred to as being attached or enclosed, and/or fee, is being deposited with the United States Postal Service, "EXPRESS MAIL-POST OFFICE TO ADDRESSEE" service under 37 CFR 1.10, on the date indicated above, and addressed to: Mail Stop Patent Application, Commissioner for Patents, Alexandria, VA 22313-1450.
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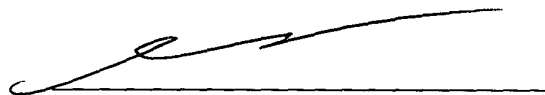
The examiner is requested to review each of the references and make them of record during the prosecution of this application as required by M.P.E.P. §609. It is requested that the Examiner initial the duplicate substitute Form 1449, and return one copy to the undersigned.

Pursuant to 37 C.F.R. § 1.98(d), copies of the references listed in the PTO Form 1449 are not enclosed, since this patent application is a continuation of application number 09/874,720, filed June 5, 2001. A copy of each listed reference is contained in the file of application number 09/874,720. Examiner should contact the undersigned if additional copies of any of the listed references are needed.

This Information Disclosure Statement should not be construed as a representation that the cited references are material or that no better art exists.

Respectfully submitted,

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SUBSTITUTE FORM PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. 44684-0001 CT1	SERIAL NO. Not yet assigned
INFORMATION DISCLOSURE CITATION		APPLICANT: Howard B. Gamper et al.	
		FILING DATE Herewith	GROUP Not yet assigned

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
	AA	6,010,907	01/4/00	Kmiec et al.	435	455	
	AB	5,888,983	04/30/99	Kmiec et al.	514	44	
	AC	5,871,984	02/16/99	Kmiec	435	172.3	
	AD	5,795,972	08/18/98	Kmiec	536	23.1	
	AE	5,760,012	06/2/98	Kmiec et al.	514	44	
	AF	5,756,325	05/26/98	Kmiec	435	172.3	
	AG	5,731,181	03/24/98	Kmiec	435	172.3	
	AH	5,780,296	07/14/98	Holloman et al.	435	320.1	
	AI	5,565,350	10/15/96	Kmiec	435	172.3	
	AJ	5,334,711	08/2/94	Sproat et al.	536	24.5	

FOREIGN PATENT DOCUMENTS

		DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	AK	WO 95/15972	06/15/95	WO				
	AL	449,375 A2	03/25/91	EP				
	AM							

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	AN	Richard J. Bartlett et al., "In vivo Targeted Repair of a Point Mutation in the Canine Dystrophin Gene by a Chimeric RNA/DNA oligonucleotide," Nature Biotechnology 18:615-22 (June 2000).
	AO	Tong Zhu et al., "Engineering Herbicide-Resistant Maize using Chimeric RNA/DNA oligonucleotides," Nature Biotechnology 18:555-558 (May 2000).
	AP	Benjamin E. Reubinooff, "Embryonic Stem Cell Lines from Human Blastocysts: Somatic Differentiation in vitro," Nature Biotechnology 18:399-404 (April 2000).
	AQ	James A. Thomson et al., "Embryonic Stem Cell Lines Derived from Human Blastocysts," Science 282:1145-47 (Nov. 16 1998).
	AR	Betsy T. Kren et al., "Targeted Nucleotide Exchange in the Alkaline Phosphatase Gene of HuH-7 Cells Mediated by a Chimeric RNA/DNA Oligonucleotide," Hepatology 25(6):1462-68 (1997).
	AS	Allyson Cole-Strauss et al., "Recombinational Repair of Genetic Mutations," Antisense & Nucleic Acid Drug Development 7:211-16 (1997).

EXAMINER	DATE CONSIDERED
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EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

SUBSTITUTE FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

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	AT						
	AU						
	AV						

FOREIGN PATENT DOCUMENTS

		DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	AW							
	AX							
	AY							
	AZ							
	BA							

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

BB	Eric B. Kmiec, "Genetic Manipulation in Mammalian Cells using an RNA/DNA Chimeric Oligonucleotide," Adv. Drug Delivery Rev. 17:333-40 (1995).
BC	Ralph L. Brinster et. al., "Targeted Correction of a Major Histocompatibility Class IIE gene by DNA Microinjected into Mouse Eggs," Proc. Nat'l Acad. Sci. USA 86:7087-91 (Sept. 1989).
BD	Mario R. Capecchi, "Altering the Genome by Homologous Recombination," Science 244:1288-92 (June 16, 1989).
BE	Charles S. Gasser and Robert T. Fraley, "Genetically Engineering Plants for Crop Improvement," Science 244:1293-99 (June 16, 1989).
BF	Lima et al. "Binding Affinity and Specificity Of Escherichia coli RNase H1." Biochemistry. 14 January 1997, Vol. 36, No. 2, pages 390-398.
BG	Database MEDLINE, Acession No. 95152260, PODDEVIN et al. "Improved anti-herpes simplex virus Type 1 activity of phosphodiester antisense oligonucleotide containing a 3'-terminal hairpin-like structure." Abstract, Antisense Research and Development. 1994. Vol. 4, No. 3, pages 147-154.
BH	Steege et al., Nature Biotechnology 19: 305-306, April 2001
BI	Thomas and Capecchi, Science 275 (5305): 1404-1405, 1997
BJ	Stasiak, et al., Science 277(5325): 460-462, 1997
BK	Zhang, et al., Antisense & Nucleic Acid Drug Dev. 8: 531-536, 1998
BL	Alberque - Silva et al., Nature Biotechnology 19: 1011, November 2001
BM	Taubes, Science 298: 2116 - 2120, December 2002

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DATE CONSIDERED

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if not in conformance and not considered. Include copy of this form with next communication to applicant.